

Title (en)

ILLICIT ACT DETECTION METHOD, ILLICIT ACT DETECTION DEVICE, AND PROGRAM

Title (de)

BETRUGSERKENNUNGSVERFAHREN, BETRUGSERKENNUNGSVORRICHTUNG UND PROGRAMM

Title (fr)

PROCÉDÉ DE DÉTECTION DE FRAUDE, DISPOSITIF DE DÉTECTION DE FRAUDE ET PROGRAMME

Publication

**EP 4250648 A3 20231206 (EN)**

Application

**EP 23191161 A 20181204**

Priority

- JP 2018064431 A 20180329
- JP 2018044568 W 20181204
- EP 18910237 A 20181204

Abstract (en)

A fraud detection method includes: determining whether a period of a message repeatedly transmitted in an in-vehicle network is anomalous (S1002); detecting whether arbitration occurs when the message is transmitted in the in-vehicle network (S1004); and determining that the message is an anomalous message, in the case where the period of the message is anomalous and no arbitration occurs when the message is transmitted in the in-vehicle network (S1006).

IPC 8 full level

**H04L 12/40** (2006.01); **H04L 9/40** (2022.01); **H04L 12/413** (2006.01); **H04L 67/12** (2022.01)

CPC (source: CN EP US)

**H04L 12/40013** (2013.01 - EP); **H04L 12/40026** (2013.01 - US); **H04L 12/4135** (2013.01 - EP); **H04L 63/1425** (2013.01 - CN EP US); **H04L 63/1466** (2013.01 - CN US); **H04L 67/12** (2013.01 - EP); **H04W 4/48** (2018.02 - EP); **H04L 2012/40215** (2013.01 - CN EP US); **H04L 2012/40273** (2013.01 - CN EP US)

Citation (search report)

- [A] EP 2797263 A1 20141029 - TOYOTA MOTOR CO LTD [JP]
- [A] EP 2950482 A1 20151202 - HITACHI AUTOMOTIVE SYSTEMS LTD [JP]
- [A] US 2016188396 A1 20160630 - SONALKER ANUJA [US], et al

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

**EP 3772200 A1 20210203**; **EP 3772200 A4 20210519**; **EP 3772200 B1 20230920**; CN 110546921 A 20191206; CN 110546921 B 20221028; EP 4250648 A2 20230927; EP 4250648 A3 20231206; JP 2019176473 A 20191010; JP 2023090979 A 20230629; JP 7280082 B2 20230523; JP 7512473 B2 20240708; US 2020021611 A1 20200116; WO 2019187350 A1 20191003

DOCDB simple family (application)

**EP 18910237 A 20181204**; CN 201880022000 A 20181204; EP 23191161 A 20181204; JP 2018044568 W 20181204; JP 2019057269 A 20190325; JP 2023078576 A 20230511; US 201916583996 A 20190926